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Office Action

Patent Application Number: 181025/2001
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Examiner of the Patent Office: Takahiko Tooyama 9855 5J00
Agent for the Applicant: Yasuo Sakuta
Applicable Article: Paragraph 2 of Article 29, Article 36

This application should be rejected for the following reason. If the applicant has an opinion on the examiner's reason for rejection, the applicant can file an argument within 60 days from the mailing date of this office action.

Reason for rejection

[1] This application does not meet the requirements as set forth in Paragraph 5-2 and Paragraph 6 of Article 36 of the Patent Law for the following reason.

According to Claim 1 of the present application, "makes said second electric supervisory signal by processing said first electric supervisory signal." The expression "processing" used here does not show what kind of processing is done.

Therefore, Claim 1 does not include only the features indispensable for a constitution of an invention to be patented.

2. Because the inventions claimed in the following claims of the present application could be easily made before its filing by a person having common knowledge in the technical field of the inventions on the basis of the inventions disclosed by the following publications distributed in Japan and abroad, it is deemed unpatentable in accordance with Paragraph 2 of Article 29 of the Patent Law.

(For cited references, refer to the list of cited references.)

- Claim 1

- Cited references 1 and 2
- Remarks

Reference 1 (see Fig.4 and the explanation associated with it) describes an optical repeater which receives an optical data signal (main signal) as a wavelength-division multiplexed signal and a first optical supervisory signal (light with optical wavelength λ_2 carrying all fault search current information) and multiplexes and transmits the amplified optical data signal (main signal) and a second optical supervisory signal. This optical repeater comprises the following: a demultiplexer which demultiplexes (divides) the optical data signal and the first optical supervisory signal; an optical receiver (optoelectric converter 4₁) which converts the first optical supervisory signal into a first electric supervisory signal; an optical transmitter (optical modulator 6₁) which converts the second electric supervisory signal into a second optical supervisory signal and outputs it to a second multiplexer (multiplexer 2₁); and the second multiplexer (multiplexer 2₁) which multiplexes the amplified optical data signal with the second optical supervisory signal outputted from the optical transmitter (optical modulator 6₁). Here, the second optical supervisory signal is made by processing the first electric supervisory signal.

As a result of comparison between the invention as claimed in Claim 1 of the present application and the invention described in Reference 1, it is concluded as follows.

While a doped optical fiber, an exciting light source, and a first multiplexer are provided in the present invention, a regenerating repeater is provided in the invention described in Reference 1, and while the present invention uses an optical supervisory signal with a wavelength of approximately 1.48 μm , Reference 1 has no such mention. However, Reference 2 describes a technique that a doped fiber as an optical amplifier, an exciting light source, and a multiplexer are provided and an optical supervisory signal with a wavelength of approximately 1.48 μm , is used. In addition, the inventions described in References 1 and 2 both concern monitoring technology for optical amplifier repeaters, so a person skilled in the art can easily make the invention claimed in Claim 1 of the present application based on the inventions described in References 1 and 2.

If a new reason for rejection is found, the applicant will be notified of it.

List of cited references

1. Japanese Unexamined Patent Publication No.083899/1982
2. Japanese Unexamined Patent Publication No. 022925/1992

Record of prior art literature search result

Field of investigation: IPC Edition 7 H04B 10/00-10/28
H04J 14/00-14/08

Prior art literature: Japanese Unexamined Patent Publication No. 214936/1991
Japanese Unexamined Patent Publication No. 270520/1991

This record of prior art literature search result does not constitute a reason for rejection.

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